i2 summit 2011
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E1706
JACC April 5, 2011
Volume 57, Issue 14

i2 SUMMIT

DRUG-ELUTING VERSUS BARE-METAL STENTING IN LARGE CORONARY ARTERIES IN THE EVENT REGISTRY

i2 Poster Contributions
Ernest N. Morial Convention Center, Hall F
Sunday, April 03, 2011, 10:00 a.m.-11:15 a.m.

Session Title: PCI - DES I
Abstract Category: 16. PCI - DES (clinical/outcomes)
Session-Poster Board Number: 2501-600

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Background: Numerous randomized trials have demonstrated that drug-eluting stents (DES) reduce clinical and angiographic restenosis compared with bare metal stents (BMS) in 2.5-3.5 mm diameter coronary arteries . The benefits of DES in large (≥3.5mm) diameter coronary arteries are less well established, however.

Methods: We used data from the multicenter EVENT registry to compare clinical outcomes among patients undergoing PCI with either DES (n=1557) or BMS (n=338) for lesions with reference diameters 3.5-5.0 mm. The primary endpoint was the composite of death, myocardial infarction (MI), or target lesion revascularization (TLR) at 1 year. Propensity stratification was used to adjust for baseline differences between groups.

Results: Although most patient charcteristics were similar, BMS pts were more likely to have presented with STEMI (15.2% v. 8.5%). Maximum balloon diameters were larger in the BMS group, whereas the DES group underwent more bifurcation stenting (10.6% vs 5.2%) and had longer total stent lengths (22.9mm vs 21.1mm). Both in-hospital and 1-year clinical outcomes were comparable between the DES and BMS groups (see Table). Similar results were observed in risk-adjusted analyses as well.

	Patients with BMS only (N=328)	Patients with DES only (N=1557)	P-value
In-Hospital Outcome			
MACE (Death/MI/Urgent Repeat PCI or CABG)	7.0% (23/328)	6.7% (104/1557)	0.827
Death/MI	6.1% (20/328)	6.6% (102/1557)	0.762
Death	0.0% (0/328)	0.1% (2/1557)	0.516
Urgent Repeat PCI or CABG	0.9% (3/328)	0.4% (6/1557)	0.206
Stent Thrombosis	0.0% (0/328)	0.1% (2/1557)	0.516
1-Year Outcome			
MACE (Death/MI/TLR)	13.0% (41/315)	11.3% (167/1476)	0.392
Death/MI	9.5% (30/315)	9.0% (133/1476)	0.774
Death	1.3% (4/315)	1.2% (17/1476)	0.860
TVR	5.1% (16/315)	4.7% (70/1476)	0.800
TLR	4.8% (15/315)	3.2% (47/1476)	0.164
Stent Thrombosis	0.0% (0/315)	0.5% (7/1476)	0.221

Conclusion: In native coronary arteries ≥ 3.5mm diameter, there was little clinical benefit of DES over BMS over the first year of follow-up with a non significant increase in stent thrombosis.